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## Health Protection Information Inside!

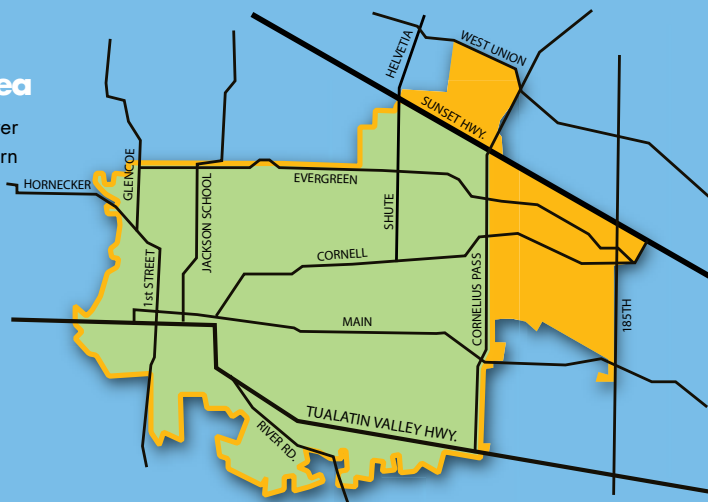
Este informe contiene información muy importante sobre su agua beber. Copias en español están disponibles en el Hillsboro Civic Center.

**Hillsboro**  
Water  
150 E. Main Street  
Hillsboro, OR 97123



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## City of Hillsboro Water Service Area

Service is also provided to over 600 rural customers in Western Washington County.



### KEY

-  Hillsboro City Limits
-  Hillsboro Service Area



# 2013 Consumer Confidence Report

Based on water quality data from  
the calendar year 2012

**Hillsboro**  
Water

# History of Hillsboro's Source Water



**Pre 1913:** City of Hillsboro on Well Water

**1913:** Public Water Service begins with Sain Creek connection to Hillsboro via Wooden Pipe



**1940:** Hillsboro purchases Water System and forms Utilities Commission

**1948:** Hillsboro begins serving customers from Haines Falls



**1971:** Barney Reservoir put into service

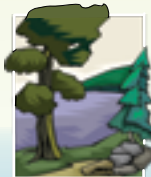
**1974:** Scoggins Reservoir put into service



**1977:** Treatment Plant & Tualatin River intake completed at Fern Hill



**2000:** Barney Reservoir Expansion put into service



**2013:** Mid-Willamette River Designated Hillsboro's preferred additional source



## Hillsboro Celebrates 100 Years of Public Water Service!

"Officials display foresight in water system" reads the article headline in the 1976 Hillsboro Centennial Edition of the Argus. As the city celebrated its milestone, much attention was given to the city accomplishing the industrious development of a water system capable of serving community water needs into the 21st century. That water system is now celebrating its own Centennial, as 1913 marks the year a wooden pipe made Hillsboro's first public water delivery from the Tualatin Watershed.

Over the last 100 years, the city has expanded and upgraded its water system multiple times, always looking to the future to provide customers and businesses with the water needed to thrive. While originally projected in 1913 to serve a population up to 50,000, the additions of man-made Scoggins and Barney Reservoirs in the early 1970's, as well as the construction of the Joint Water Commission Treatment Plant in 1976, have increased the service capacity of the system from just 2,000 Hillsboro customers to over 400,000 customers throughout Hillsboro and other Washington County communities.

As we pause for a season to reflect the high value that the Hillsboro community has always placed on its water system, it is important to note that Hillsboro is still a city in pursuit of its ultimate potential, and preparations must be made to meet the needs and challenges of the next generation. Resting on our laurels is not an option. The best way to honor the past is to move diligently forward with plans to make sure the Hillsboro Water you count on today continues to be a high-quality service you can count on for the next 100 years.

"The best way to honor the past is to move diligently forward with plans to make sure the Hillsboro Water you count on today continues to be a high-quality service you can count on for the next 100 years."

*John Godsey*  
Commissioner John Godsey,  
Utilities Commission Chair

## Water Quality, Reliability— Top Concerns for Customers

When you jumped in the shower this morning, was there any doubt whether the water would be there when you turned the tap? The last time you got a drink from the faucet were you satisfied with taste and quality? These top two issues for Hillsboro Water (HW) customers are top priorities for HW. Our mission is to instill complete confidence in our customers that we will protect public health, and deliver a great-tasting product of excellent value.

Part of ensuring reliability of service is making sure that pipes are maintained and replaced at the end of their life cycles—before deterioration causes unreliable service (leaks) or water quality issues. HW is getting ready to spend two million dollars replacing pipes that are over 50 years old in Oak and Baseline, as part of a larger street improvement project by the Oregon Department of Transportation (ODOT). The entire project is slated to be completed in 2015. It saves our customers money and aggravation when we can replace water infrastructure in conjunction with other agency projects. For more information, visit the project website at [www.tvhwypaving.org](http://www.tvhwypaving.org).



*Certified operators routinely collect and test water samples every step of the way—from source waters to your meter. Our treatment plants are maintained, evaluated and upgraded regularly to stay abreast of advancements in technology, health science and government regulations.*

## Summer Centennial Celebration

Throughout the summer, we are celebrating the historic impacts of Hillsboro's water system on the community. A calendar of events where you will find HW during the summer is available at [www.hillsborowater.org](http://www.hillsborowater.org).



## Information About Lead and Copper

While there is no MCL for lead or copper, the federal government identifies "action levels" that trigger certain actions by the water provider. The action level is based on the 90th percentile. This means that 90 percent of the samples must meet or be under the defined action level. The action level for copper is 1.3 ppm and the action level for lead is 15 ppb.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Hillsboro Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for thirty seconds to two minutes before using water for drinking or cooking.

*Look for the Hometown Tap around town all summer and fill up with fresh drinking water—remember to bring your refillable water bottle.*



## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at **800-426-4791**.



The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at **800-426-4791**.

## Microbials

Hillsboro operators collect samples from throughout the service area to test for coliform bacteria. Most coliforms are not harmful, but they can be an indicator that other disease-causing organisms may be present. If testing indicates that a routine sample appears to contain coliforms, a set of repeat samples is collected and analyzed to determine whether any disease-causing organisms are present.

*Cryptosporidium* and *Giardia* are microscopic organisms that, when ingested, may cause gastrointestinal symptoms. There are no EPA-mandated maximum contaminant levels (MCLs) required for either *Giardia* or *Cryptosporidium*. However, because of the potential health effects of these organisms, the City of Hillsboro regularly tests for them in its water before and after treatment. Though very small amounts of these organisms were present in the pre-treatment samples, no *Cryptosporidium* or *Giardia* cysts were detected in the treated water.

## Unregulated Contaminant Monitoring Rule

The Joint Water Commission, of which Hillsboro Water is a partner, has complied with the EPA's unregulated contaminant monitoring rule (UCMR) and results are available upon request from the Resource Division. No unregulated contaminants, tested for as part of this program, have been detected through the rigorous monitoring process. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. For more information, please call Jessica Dorsey at **503-615-6579**.

### 2012 Mineral Content

Substance	Content Range
Calcium	6.7 - 7.1 mg/L
Chloride	4.1 - 4.9
Magnesium	2.3 mg/L
Sodium	8.8 - 9.3 mg/L
Sulphate	10 - 12 mg/L

This table displays the trace minerals content detected in the JWC and SSFP Water Systems in 2012.



During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants.

# 2012 Sampling Results

This table shows only those contaminants that were detected and how much of the substance was present in the water.

REGULATED SUBSTANCES				JWC Plant System		Slow Sand Filter Plant (SSFP)			
Substance (Unit of Measure)	Year Sampled	MCL (MRDL)	MCLG (MRDLG)	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Violation?	Typical Source
Chlorine (CL <sub>2</sub> ) (ppm)	2012	(4)	(4)	1.18	0.82-1.18	1.59	1.01-1.59	No	Water additive used to control microbes
Nickel (ppb)	2012	N/A	N/A	0.28	ND-.28	ND	ND	No	Natural deposit erosion
Nitrate (as Nitrogen) (ppm)	2012	10	10	0.42	0.21-.42	0.14	.05-.14	No	Fertilizer runoff
Nitrite (ppm)	2012	1	1	0.03	ND-.03	ND	ND	No	Fertilizer runoff
Chromium (ppb)	2012	100	100	1	.4-1	ND	ND	No	Pulp mill discharge, natural deposit erosion
Barium (ppm)	2012	2	2	0.005	.003-.005	0.001	ND-.001	No	Natural deposit erosion
Total Coliform Bacteria (% positive samples)	2012	5% monthly samples positive	0	3.5%	ND-3.5%	ND	ND	No	Naturally present in environment
Turbidity (NTU)	2012	TT	NA	0.1	.02-.10	0.34	.05-.34	No	Soil Run-off
Turbidity (Lowest monthly %)*	2012	TT	NA	100	NA	100	NA	No	Soil Run-off

## DISINFECTION BY-PRODUCTS (DBP)

Haloacetic Acids [HAA] (ppb)	2012	60	NA	28.8	17.7-28.8	16.8	10-16.8	No	By-product of chlorination
TTHMs [Total Trihalomethanes] (ppb)	2012	80	NA	41	18.7-41	17	7.2-17	No	By-product of chlorination

*HAA's and TTHMs are measured quarterly at four Hillsboro sites for JWC & one site for the SSFP. Results are reported as a running annual average.*

## LEAD AND COPPER TESTING

Substance (Unit of Measure)	Year Sampled	Action Level	MCLG	Amount Detected 90th %tile	Sites Above AL	Amount Detected 90th %tile	Sites Above Action Level	Violation?	Typical Source
Copper (ppm)	2012	1.3	1.3	0.095	0	0.143	0	No	Corrosion to household plumbing and natural deposit erosion
Lead (ppb)	2012	15	0	3	0	2	0	No	

*Tap water samples were collected from sample sites throughout the community. Although all detections listed here are well under the Maximum Contaminant Level (MCL), it is important to us that you know exactly what was detected and how much of the substance was present in the water.*

**AL=Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**MCL=Maximum Contaminant Level:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG=Maximum Contaminant Level Goal:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MRDL=Maximum Residual Disinfectant Level:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG=Maximum Residual Disinfectant Level Goal:** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**ND=Not Detected**

**NTU=Nephelometric Turbidity Units:** Measurement of the clarity, or turbidity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**ppb=Parts Per Billion:** One part substance per billion parts water (or micrograms per liter).

**ppm=Parts Per Million:** One part substance per million parts water (or milligrams per liter).

**TT=Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

**Turbidity:** Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the plant filtration system. \*Lowest monthly % of samples meeting limit.

## Source Water Assessment

The Department of Environmental Quality (DEQ) and the Oregon Health Authority (OHA) completed a source water assessment that identified the surface areas supplying water to the Tualatin River intakes. They also inventoried the potential contaminant sources that may affect the water supply. A total of 306 potential contaminant sources were identified and 295 of those sources are located in sensitive areas. Sensitive areas include places with high soil permeability, high soil erosion potential, high run-off potential, and areas within 1,000 feet of a river or stream. Potential sources of watershed contamination include the following: agricultural/forest management applications, commercial land uses, residential/municipal land uses, and landslide and clear-cut forest areas. These are the existing potential sources of contamination that could, if improperly managed or released, affect the water quality in the watershed.



*The JWC-Cherry Grove Source Water Assessment Report provides additional details on the methodology and results of this assessment. The full report is available at the Hillsboro Water Department, 150 East Main Street, or call 503-615-6702 for more information.*

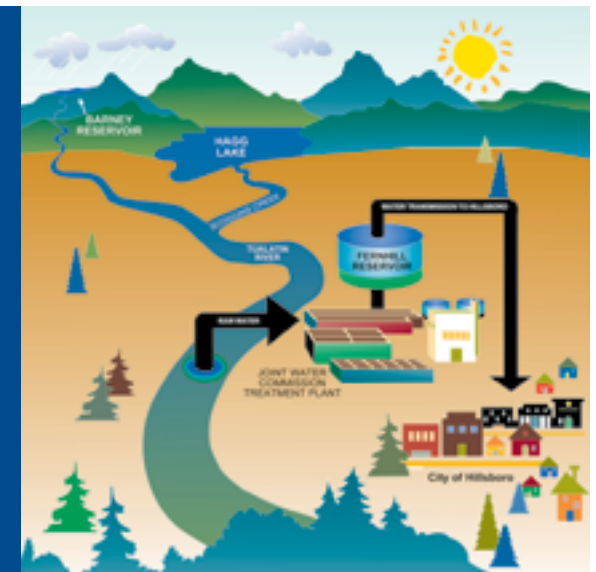
## COMMITMENT TO QUALITY

Since 1940, City of Hillsboro's goal has been to provide safe and high quality drinking water for all its water customers. To maintain our commitment to you, certified operators routinely collect and test water samples every step of the way—from source waters to your meter. Our treatment plants are maintained, evaluated and updated regularly to stay abreast of advancements in technology, health science and government regulations. Because of prudent long-term planning and operational efficiency, we are able to provide you with high-quality drinking water at the lowest rates in the region. For questions relating to your drinking water, please call Tacy Steele, Public Information Officer, at **503-615-6732**.

## Hillsboro's Water—Source to Tap

All of the water that runs through your tap is treated surface water, which means it comes out of a river or reservoir. Hillsboro's winter water source is the upper Tualatin River. In summer, the river level drops too low for municipal use, so Hillsboro relies upon water stored in Barney Reservoir and Hagg Lake to meet customer needs. Hillsboro's water is drawn out of the upper Tualatin River for filtration and treatment at either the Cherry Grove Slow Sand Filter Plant (SSF) or the Joint Water Commission (JWC) Treatment Plant. Both plants operate 24 hours per day, 365 days per year. The SSF Plant can treat up to three million gallons per day (MGD), providing water to Cherry Grove, the City of Gaston, the L.A. Water Co-op, Scoggins Valley and Dilley. After treatment, SSF water flows through an 18-inch line to Dilley; along the way water is fed to Hillsboro's county and wholesale customers. The JWC plant is the largest conventional water treatment plant in Oregon and is capable of treating up to 75 MGD. It provides water to the JWC partner agencies of Hillsboro, Forest Grove, Beaverton and Tualatin Valley Water District, and also wholesales water to North Plains. The City of Hillsboro typically uses 14 MGD of combined JWC and SSF plant capacities to meet customer needs, but summertime usage can push that demand up to almost 28 MGD, primarily due to outdoor watering habits. The water is delivered to Hillsboro and beyond via two large transmission lines. There are approximately 250 miles of distribution lines in the city of Hillsboro that are fed by the transmission lines. These lines provide water to over 24,000 business and residential customers who live to the west of Cornelius Pass Road. The Tualatin Valley Water District serves Hillsboro residents living to the east of Cornelius Pass Road.

*Hillsboro treatment plants are maintained, evaluated and upgraded regularly to stay abreast of advancements in technology, health science and government regulations.*



Hillsboro Water is moving forward with plans to secure an additional water supply that will meet the needs of Hillsboro's next generation—just like the previous generation did for us 50 years ago.



## Hillsboro Plans for Future Water Users

After much deliberation, and an intense collection of input from water customers around Hillsboro, the Utilities Commission selected the mid-Willamette River as its preferred future source for the next generation of water customers. A multi-year study of local water sources with potential for meeting Hillsboro's future water needs determined the mid-Willamette as the additional source that best met the value criteria set by the community.

Now, Hillsboro and its partner, Tualatin Valley Water District, are moving ahead with plans for a decade-long project to build a new water system that will supplement and support the existing water supply system in the Tualatin Watershed. Major components of this visionary project will include: securing rights to a new water source, building a new, state-of-the-art treatment plant, securing easements and laying miles of transmission pipeline, including a river crossing, and building a storage reservoir for the new supply.

Opportunities for partnering on portions of the project with Washington County and other agencies may come up at different times throughout the next decade, and Hillsboro plans to take advantage of these cost-saving partnerships to maximize efficiency and reduce project costs similar to the Oak/Baseline projects.

**For more information on Hillsboro's future water supply, please visit:**  
[www.hillsborowatersupply.org](http://www.hillsborowatersupply.org).



## Will Crandall Reservoir Project "Wrapping Up"

Construction on the 10 million gallon (MG) Crandall Reservoir continues, on schedule to meet the completion date of October 2013. When the project is completed, the reservoir will be one of three water reservoirs in Hillsboro that hold a combined 31 MG of drinking water.

The reservoir is built to withstand a major earthquake. The exterior of the reservoir is wrapped with layers of 3/8" galvanized cable. A total of 80 miles of cable has been wrapped around the structure, with a layer of shotcrete (concrete slurry) sprayed over each layer. The cable is stressed to 14,950 pounds to provide stability to the structure, primarily during seismic events.

*A Public Open House will be scheduled upon completion of the reservoir to offer customers a peek at Hillsboro's newest water infrastructure. Look for the date and other details sometime this fall.*

*The Crandall Reservoir is built to withstand a major earthquake*





## Conservation Programs Save Water and Money

**Free Water Savers:** Hillsboro Water (HW) always has water-saving devices available at the office for customers who want to reduce their water use indoors. Devices offered include: water-saving showerheads, kitchen and bathroom aerators, and toilet fill-cycle diverters.

**Home Water and Energy Assessments:** HW is offering its residential customers FREE Home Water & Energy Assessments, provided by Energy Trust of Oregon. A water and energy efficiency expert will come to your home and perform the following services:

- ✓ Check for leaks
- ✓ Recommend water and energy saving measures specific to your home
- ✓ Install FREE water and energy saving devices that may include: faucet aerators, showerheads and compact fluorescent light bulbs

To schedule your FREE Home Water & Energy Assessment, contact Energy Trust of Oregon at **1-866-368-7878**.

### Water efficiency Appliance Rebates:

- \$50 Energy Star® Washing Machine Rebates
- \$75 WaterSense® High Efficiency Toilet Rebates

Details on Water Efficiency Rebates available at [www.hillsborowater.org](http://www.hillsborowater.org).



Hillsboro's Community Garden Program partners with Hillsboro Water to encourage sustainable gardening practices, including water-wise irrigation.



*Residential customers have decreased usage by almost 20% over the last decade by installing water-efficient appliances, fixing leaks, and saving water in creative ways—like sharing bubbles with a friend.*

## Frequently Asked Questions

Does Hillsboro put fluoride in the water? The City of Hillsboro does not fluoridate its water supply. Check with your dentist to see if supplemental fluoride is recommended for your family.

Is Hillsboro's water hard or soft? Hillsboro does not use any well water in its supply, so the water is very soft, about 2-3 grains per gallon.

What is the pH of our drinking water? Hillsboro's water is buffered to reduce pipe corrosion and protect against lead and copper exposure. The normal pH range for your drinking water is 7.7 to 7.9.

## Community Participation

The City of Hillsboro Utilities Commission normally meets at 1:30 pm, on the 2nd Tuesday of every month in the Civic Center at 150 E. Main Street, Room 207. Commission meetings are open to the public. Agendas are listed at [www.ci.hillsboro.or.us](http://www.ci.hillsboro.or.us), or call 503-615-6702.

## Public Hearing

The City of Hillsboro Utilities Commission (UC) will be holding a public hearing on July 9, 2013, at 1:30 pm, in Room 113B of the Hillsboro Civic Center, 150 E. Main, Hillsboro. The UC will be considering a water rate increase that, if approved, would be implemented October 1, 2013.



The 2014 Calendar Contest asked students to help Hillsboro commemorate, "100 years of Public Water Service."

Memory Condren, Orenco Elementary, illustrated a festive cover complete with a birthday cake. Calendars will be available later this year.